UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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# NOTICE OF ALLOWANCE AND FEE(S) DUE

87731	7590	10/28/2010
McCarter &	English, LLP	& Eisai Co
265 Franklin	Street	
Boston, MA	02110	

EXAMINER						
OLSON, ERIC						
ART UNIT	PAPER NUMBER					
1623	•					
DATE MAILED: 10/28/2010						

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/546,132	12/12/2005	Rulin Fan	117824-02402	9915		
TITLE OF INVENTION: REAGENTS AND METHODS FOR PREPARING LPS ANTAGONIST B1287 AND STEREOISOMERS THEREOF						

 APPLN TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV\_PAID ISSUE FEE
 TOTAL FEE(s) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 01/28/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions	ng the Patent, advance on herwise in Block 1, by (	rders and notification of r a) specifying a new corres	naintenance fees wi pondence address;	II be and/or	mailed to the current (b) indicating a sepa	corres	spondence address as FEE ADDRESS" for
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								(Depositor's name)
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	/	ATTO	RNEY DOCKET NO.	CO	NFIRMATION NO.
10/546,132	12/12/2005		Rulin Fan			17824-02402		9915
			NG LPS ANTAGONIST I					
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE		DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810		01/28/2011
EXAM		ART UNIT	CLASS-SUBCLASS					
OLSON		1623	536-018700					
1. Change of correspondence address or indication of "Fee Address" (3 CFR 1.56).  Change of correspondence address (or Change of Correspondenc Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47, Rev 03-02 or more recent) attached. Use of a Custom Number is required.			(I) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto	For printing on the patent front page, list the names of up to 3 registered patent attorneys agents OR, alternatively, the names of up to 3 registered patent attorneys agents OR, alternatively, the names of a single firm (having as a member a  glestered attorney or agent) and the names of up to registered patent attorneys or agents. If no name is  december of the printed.				
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4a. The following fee(s)  Issue Fee	are submitted:	4	<ul> <li>b. Payment of Fee(s): (Plea</li> <li>A check is enclosed.</li> </ul>	se tirst reapply an	y prev	lously paid issue fee	snowr	1 above)
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	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no lon					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than to Office.	he applicant; a regis	tered :	attorney or agent; or th	ie assi	gnee or other party in
Authorized Signature				Date				
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandra, Virgima 22313-1450 www.uspto.gov

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McCarter & English, LLP & Eisai Co.		OLSON, ERIC				
265 Franklin Stre	265 Franklin Street Boston, MA 02110		ART UNIT PAPER NUM			
Boston, MA 021			1623			

DATE MAILED: 10/28/2010

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/546,132 FAN. RULIN Notice of Allowability Examiner Art Unit FRICS OLSON 1623 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to Applicant's communication submitted June 21, 2010. The allowed claim(s) is/are 120-123,125,126,128,130-133,135,136 and 138. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

Primary Examiner, Art Unit 1623

/Eric S Olson/

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# Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 21, 2010 has been entered.

#### Detailed Action

This office action is a response to applicant's communication submitted June 21, 2010 wherein the rejections of record in the previous office action are traversed. This application is a national stage application of PCT/US04/04921, filed February 18, 2004, which claims benefit of provisional application 60/448839, filed February 20, 2003.

Claims 120-123, 125, 126, 128, 130-133, 135, 136, and 138 are pending in this application.

Claims 120-123, 125, 126, 128, 130-133, 135, 136, and 138 as amended are examined on the merits herein.

## Reasons for Allowance

Applicant's arguments, submitted June 21, 2010, with respect to the rejection of instant claims 120-123 and 130-133 under 35 USC 103(a) for being obvious over Rossignol et al. in view of Sanghvi et al., have been fully considered and found to be

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persuasive to remove the rejection as there would be no specific motivation or expectation of success for making the specific claimed compounds recited in the claims. Therefore the rejection is withdrawn.

Applicant's arguments, submitted June 21, 2010, with respect to the rejection of instant claims 125, 126, 128, 135, 136, and 138 under 35 USC 103(a) for being obvious over Rossignol et al. in view if Greene et al., have been fully considered and found to be persuasive to remove the rejection as there would be no specific motivation or expectation of success for making the specific claimed compounds recited in the claims. Therefore the rejection is withdrawn.

Currently claims 120-123, 125, 126, 128, 130-133, 135, 136, and 138 are pending in this application and have been examined on the merits herein. Applicant's arguments submitted June 21, 2010, are seen to be persuasive to remove all rejections of record in the previous office action and place the application in condition for allowance. Reasons for allowance are as follows:

The claimed invention is seen to be adequately described and enabled by the specification as originally filed. Therefore the claims meet the requirements of 35 USC 112.

Furthermore the claims are seen to be novel and non-obvious over the prior art.

The prior art does not disclose any of the specific claimed compounds. Although

Rossignol et al. (Reference of record in previous action) discloses several synthetic

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intermediates which have a similar structure to the claims saccharides, modifying the synthetic scheme disclosed by Rossianol et al. in order to arrive at a synthetic scheme that would produce the claimed compounds as intermediates would involve arbitrary modification of the order of attachment and removal of various protecting groups. Firstly, there is no guidance or motivation in the prior art that would lead one of ordinary skill in the art to decide to modify the synthetic scheme of Rossignol et al. in such a way as to arrive at these intermediates as opposed to any other arbitrarily selected synthetic scheme proceeding through other intermediates. Furthermore, as discussed in the declaration of James E. Foy submitted July 2, 2008, any synthetic scheme proceeding through the claimed intermediates would require the omission or early removal of certain protective groups from the intermediates in order to attach the fatty acyl groups at an earlier point in the synthesis. According to MPEP 2144.04(b), omission of an element (in this case the protecting group) with retention of its function (i.e. providing stability at this position of the molecule during other synthetic transformations) is evidence of nonobviousness. For these reasons the claims meet the requirements of 35 USC 102 and 103.

Accordingly, Applicant's arguments submitted June 21, 2010, are sufficient to remove all rejections made in the prior office action as discussed above and to place the application in condition for allowance.

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Any comments considered necessary by Applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled, "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric S. Olson whose telephone number is 571-272-9051. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on (571)272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Eric S Olson/ Primary Examiner, Art Unit 1623 10/23/2010